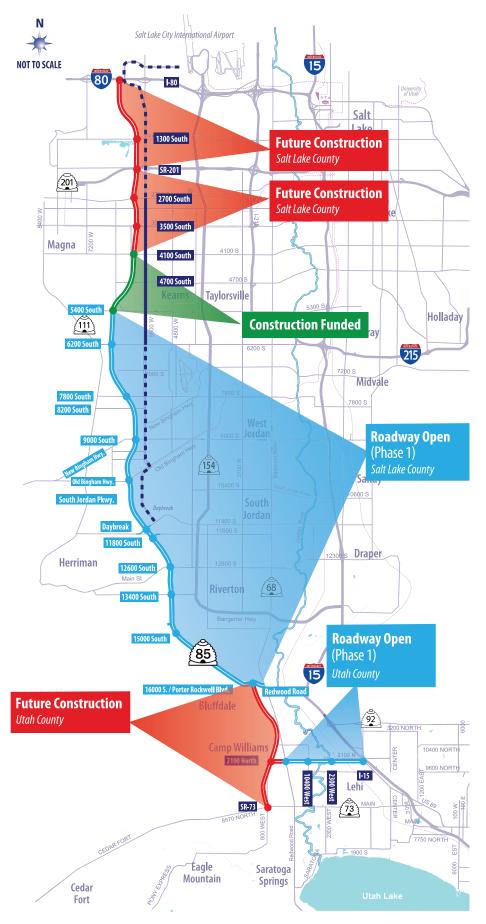
PHASED CONSTRUCTION APPROACH.....



- Current Intersection/Future Interchange
- Future Intersection/Future Interchange
- Construction Funded from 5400 S. to 4100 S.
- Initial Transit Project
- •••• Future Transit Projects

PHASE 1

UDOT constructed two lanes in each direction, and the on-and-off ramps of the future freeway from 16000 South to 5400 South. Trail and bike lanes run adjacent to the entire corridor. Future construction will extend the roadway from 5400 South to S.R. 201.



PHASE 2

UDOT will convert the existing signalized intersections to freeway interchanges.

PHASE 3

UDOT will add additional lanes in each direction.





MVC AIR QUALITY WORKING GROUP UPDATE

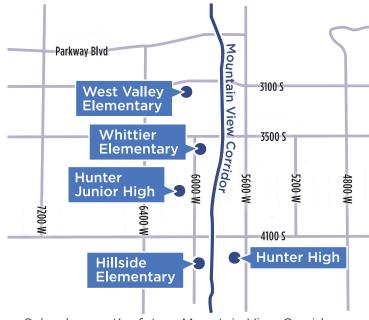
JANUARY 2015



The Utah Department of Transportation (UDOT) is constructing the Mountain View Corridor (MVC), a planned freeway from Interstate 80 in Salt Lake County to state Route 73 in Lehi.

During the MVC Draft Environmental Impact Statement (EIS) public comment period, UDOT received comments from residents with concerns about the air quality near public schools surrounding the corridor. In an effort to be responsive to the comments, the Record of Decision (ROD) described the creation of the MVC Air Working Group (AWG) to monitor the air quality effects of the new roadway and to address potential impacts resulting from the construction of the roadway near five schools in the Granite School District (GSD).

The decision to incorporate the comments as mitigation commitments does not represent a determination by the Federal Highway Administration (FHWA) or UDOT that the MVC project or any other road will cause measurable adverse health effects on population near roads.



Schools near the future Mountain View Corridor.

The first step of the group was to measure the background pollutant levels and monitor Mobile Source Air Toxics (MSATs), and other relevant pollutants for future comparison, plus evaluate existing ventilation systems in the schools and recommend a mitigation strategy. \$1 million for monitoring and \$3.1 million for mitigation was allocated.

AIR QUALITY MONITORING.....

The purpose of the air quality monitoring is to characterize air quality prior to any construction in order to provide a baseline for comparison with future monitoring to be done during and after construction.

The project has four major objectives:

- Monitor background air quality focusing on MSATs and particulate matter less than 10 micrometers (PM₁₀)
- Monitor wind speed and direction at the five schools
- Design a mitigation approach to reduce MSATs particles indoors
- Recommend future monitoring and mitigation efforts

Evaluation of air quality and its potential health risks were performed using the data collected at Hunter High School from August 2011 to July 2012. Conclusions from the background-monitoring project include:



Diesel particulate matter (DPM) is the most critical MSAT to monitor since it is the greatest contributor to cancer risk.



Black carbon concentrations, a component of DPM, are higher during the morning and evening commute.



Measured toxic concentrations are comparable to the measurements at the Bountiful, Utah, Division of Air Quality (DAQ) monitoring station* and to observed and modeled urban concentrations nationally.



Expected pollutant concentrations may be higher when winds are more parallel to the roadway.



Ultra-fine particle (UFP) data was collected for comparison with future data collected next to MVC. According to the data, UFP concentrations were about one-half of the UFP concentrations next to US Route 95 in Las Vegas.

*Already existing DAQ monitoring station

**US Route 95 in Las Vegas has a similiar air quality monitoring project



Meteorogical monitor at Hillside elementary school.



Air-quality monitor at Hunter High School.

MITIGATION RECOMMENDATIONS/EFFORTS

The recommended mitigation strategy is to replace current filters in the schools with filters that are more efficient at removing pollutants and perform upgrades needed to handle the improved filters.

ESTIMATED COST TABLE

School	HVAC System Upgrades	Ongoing Operation and Maintenance (30 yrs)	Total Cost of Upgrades and Ongoing O&M
Whittier	\$26,973	\$136,881	\$163,854
Hillside	\$14,853	\$77,806	\$92,659
West Valley	\$53,020	\$119,350	\$172,370
Hunter Jr. High	\$91,754	\$139,411	\$231,165
Hunter High	\$243,216	\$716,233	\$959,449
Total	\$429,816	\$1,189,681	\$1,619,497

Note: \$3.1 million was allocated to the AWG for mitigation costs.

In addition to improved filtration systems in the schools, a number of other recommended mitigation efforts could reduce pollutant concentrations and/or student exposure at schools:

- Install sound walls or vegetated barriers between the schools and MVC
- Eliminate bus idling at schools
- Retrofit existing buses to reduce emissions
- Avoid outdoor activities during morning rush hour
- Minimize outdoor activities during periods with strong inversions
- Install portable classrooms as far away as possible
- Provide training for teachers whose classrooms have characteristics that could defeat the filtration system (windows that open; doors that open to the outside rather than to an interior hallway, etc.)
- Control HVAC systems to minimize filling classrooms with morning rush-hour pollutants
- Eliminate or minimize emissions from indoor sources (cleaning materials, markers, etc.)

Future monitoring near the MVC should determine both outdoor (ambient) and indoor, in-classroom impacts of pollutants from the completed roadway. In addition, some monitoring would be beneficial during construction.

THE AWG CONSISTS OF MEMBERS OF

Utah Department of Transportation (UDOT)
Utah Division of Air Quality (DAQ)
Utah Transit Authority (UTA)
University of Utah Department of Pediatrics
West Valley City (WVC)
Granite School District

Breathe Utah
Parent Teacher Association (PTA)
Sierra Club
Utah Congress of Parents and teachers
Utahns for Better Transportation
Wasatch Clean Air Coalition

The AWG contracted with Sonoma Technology, Inc. (STI) and Environmental Health & Engineering (EH&E) to conduct an air quality monitoring study to evaluate background pollution concentrations prior to construction, and to develop future monitoring and mitigation strategies for the impacted schools.

For more details on the report, visit udot.utah.gov/go/MountainViewAirQuality.

www.udot.utah.gov/mountainview A UDOT Project